

COUNTER SCALES.—H. B. Osrood, of New Haven, Ct.: I claim the method of bringing the pea to standard weight, and to enable it to indicate weight from scales on opposite sides of the beam, consisting of the adjustable pins, in combination with the pea as described, substantially in the manner set forth.

ESCAPEMENT FOR TIMEKEEPERS.—E. Paulus, of Philadelphia, Pa.: I claim the modification of the duplex escape wheel in suppressing the upright row of cogs, the manner of giving the impulse directly by it with a pin jewel set in the main roller mounted on the balance axis; the detent with its fork, toothed for gearing with the pinion of the resting cylinder, and its particular arrangement on the escape wheel axis; the arrangement of the resting cylinder with its pinion; the particular disposition of the lifting roller acting in the fork; the new and more solid arrangement to hold the escape-ment without bridges, but with simple pillars supporting two small plates secured with pins or screws, the whole constructed and operating as described, constitute a new escapement, which I introduce under the name of "Paulus escapement."

BAKE OVENS.—Wm. Pettet, of New York City: I claim, first, The arrangement and construction of an oven with two furnaces, the one being located on the exterior and the other on the interior of the oven, each communicating with the same series of flues, so that either one may be used at pleasure, whereby the heat may be retained within the oven, or diffused through the apartment, substantially as set forth. Second, I claim so constructing the interior of the described oven and its flues, that the entire lining may be removed, for the purpose of clearing the flues and replaced, substantially as described.

PRINTING INK ROLLERS.—Elisha Pratt, of Salem, Mass.: I claim the employment of an alkali in the manufacture of inking rollers, in the manner and for the purpose substantially as set forth. I also claim the use of rosin oil, rosin and shellac, in combination with the other materials employed in the manner set forth, for the purpose aforesaid.

REPEATING FIRE-ARM.—Franklin B. Prindle, of New Haven, Conn.: I am aware that many pistols, &c., are cocked by pulling the trigger, and that the charge has been carried to the rear end of the barrel by pulling a separate trigger, and that a tube has been used to contain the charges, and a spring to force them to the rear end of the tube.

And that pistols, &c., have been charged and discharged by the same trigger, as is seen in the patent issued to Lewis Jennings, December 25th, 1848—and that two charge tubes have been used under the barrel—as is seen in the application of Frederick Newbury, rejected and withdrawn, February, 1856. I therefore do not claim either of these, as such, as my invention.

But I claim the use of two charge tubes (one of which to contain the balls, and the other the cartridges), in combination with the two charges and ramrod, when constructed, arranged and made to receive the charge and deposit it in the barrel simply by pulling the trigger, substantially as set forth.

Second, I claim the combination of the hammer and sectors with the charges and ramrod (so that I may charge, cock, and fire by simply pulling the trigger), when the whole is constructed, arranged, and made to operate substantially as described.

HAY ELEVATORS.—E. M. Rees, of Norristown, Pa.: I do not desire to claim broadly the locking of the frame to and releasing it from an elevating rod, as such a device is described and claimed in the patent granted to T. T. Jarret, May 30, 1854.

Neither do I desire to claim broadly a spring latch for raising and retaining the frame.

But I claim the plate, G, with its spring bolt, F, and rod, H, in combination with the forked rod, D, with its upper end bent, as described, and its projection, F, when the several parts are constructed and arranged with respect to each other, and to the frame, substantially in the manner set forth.

STEAM VALVE.—George Riesack, of Pittsburgh, Pa.: I claim, first, The valve, D, with a projecting hollow stem, E, which is reduced so that its end presents an area only equal, or nearly so, to the ports, F, F1, F2, G, G1, G2, in combination with a main steam chest or chamber, J, and an auxiliary steam chest or casing, I, furnished with a stuffing box, d, and constructed so as to cover the whole of the back of the valve excepting the end of the stem or a portion of the back equal or nearly equal to the ports in its face, substantially as and for the purposes set forth.

Second, In combination with the above, the peculiar manner specified of making the face of the valve, D, with six ports, F, F1, F2, G, G1, G2, three for receiving and three for exhausting, said ports being arranged in such relation to each other, that when the valve is applied to an oscillating engine, the receiving ports always stands in line with an exhaust port, and that only four of the ports shall be in use when the engine is working forward, and the extra two thus kept in reserve, so that the engine may be reversed on shifting the valve, by the pressure of steam from a full openport, as set forth.

SEEDING MACHINES.—T. R. Richmond, of Maillon, Ohio: I am aware that perforated seed slides are an old device, and have been used in various ways, but I am not aware that a series of slides have been used in connection with perforated caps and plates, so arranged as to discharge continuous streams of seed. I do not claim separately, therefore, the employment or use of perforated seed slides, but, I claim the reciprocating slides, I, operated as shown, in combination with the caps, K, and plates, P, the above parts being perforated, and arranged substantially as and for the purpose set forth.

[This invention relates to that class of seeding machines which are designed for sowing seed broadcast, and consists in a novel distributing device, whereby the seed is dropped or discharged from the seed box in a continuous stream, and by a very simple arrangement of means.]

HARROWS.—Jeremiah Routh & Abel Vaughn, of Grayville, Ill.: We are aware that various harrows have been devised in which rotary motion has been given to a horizontal harrowing wheel, by means of a vertical toothed wheel upon a horizontal shaft; said vertical wheel being so hung as to take hold of the soil in passing over it, and so geared to the horizontal harrowing wheel as to give it a rotary motion by its own rotation. This we do not claim.

We claim the combination of the vertical toothed wheel, D, with the horizontal toothed wheels, B, B, said wheels being connected by gearing as described, by which we secure the necessary rotation, without either side draft or dip of the horizontal wheels, as set forth.

PRINTING PRESSES.—C. Edward Sneider, of New York, N. Y.: I claim, first, The revolving double segment frame with segments balancing each other, in combination with a rocking type bed, T, operated through the segment frames, substantially as described.

Second, I claim the rocking type frame, T, with eccentric ways, W, attached, working over fixed rollers, in the manner and for the purpose described.

Third, I claim the arrangement and the manner of operating the distributing cylinder, E, supported between the segment frames, C, upon the shaft, B, to which the segment frames are attached, said cylinder being made to revolve in the opposite direction to the motion of the shaft, and having at the same time a side motion communicated to the said cylinder for the purpose of distributing the ink upon the inking rollers, as described, in connection with an arrangement of inking rollers, operated in the manner substantially as specified.

Fourth, I claim the arrangement and construction of the fly motion, in the manner and for the purpose as described, operating in connection with the nipper, S, substantially as aforesaid.

STEAM VALVES.—William J. Stevens, of New York, N. Y.: I do not claim, broadly, the use of springs to such valves, and I do not confine myself to the application of my invention to a system of valves like those described.

But I claim the slotted lever, F, the T shaped lever, G, and the spring, K, arranged in relation with each other, and with the piston rod and the valve stem, to operate substantially as set forth.

[This invention consists in a certain arrangement of a spring and levers, for giving a sudden movement to the valves, to change the direction of the induction and eduction of the steam to and from the steam cylinder, as the piston of the engine arrives at the end of its stroke.]

MACHINES FOR POUNDING RICE.—John Tallon, of New Orleans, La.: I claim the combination of the pounder, F, arms, S, A, cross-head, C, H, connecting rod, C, R, and crank, C, K, constructed and arranged to operate in relation to each other, as shown and described, and for the purposes set forth.

FOLDING GRIDIRON.—Joseph H. Thomas, of Newark, N. J.: I do not claim the invention of double or folding grids, but, I claim the application to a folding gridiron of the hinge joint, formed by the slotted stands, b, b, and the projecting bearings on the ends of the back cross-bar, a, or their equivalents; the jointed handle, e, and slotted standard, i, or their equivalents; the whole forming an adjustable folding gridiron, substantially as described.

CEMENT FOR ROOFING PURPOSES.—Joseph Thompson, of North Wrentham, Mass.: I do not claim any mixture of the various kinds of tar and oils, but adapt such materials to the intended use, being governed in choice by the consideration of price, and confine myself to the modification produced in such mixtures by the use of soluble silicates. I call my solid mixed compound, Thompson's Improved Mastic Roofing, and my fabric, Thompson's Improved Felt.

Neither do I claim the broad ground of a combination of one or more alkaline or earthy silicates, with one or more tarry matters, but, I claim the composition substantially as described, consisting of an alkaline silicate, oil or oils, coal tar, or pitch of coal tar, and naphtha (water being added when necessary), such being for the purpose or purposes set forth.

BILLIARD CUSHIONS.—William K. Winant, of Brooklyn, N. Y.: I do not claim a steel facing to a billiard cushion, neither do I claim the attaching said strip or facing to the rubber, by causing said rubber, while melted, to flow against or around the strip of steel; neither do I claim India rubber, or other facing between the steel and the ball, but, I claim the strip, i, of steel or equivalent material, inserted into the crease or incision in the India rubber cushion, substantially as and for the purposes specified.

I also claim the metallic bearing bar, c, between the back of the India rubber and the cushion rail, substantially as and for the purposes set forth.

VARIABLE BORING BIT.—William Tucker, of Gloucester, R. I.: I am aware that it is not new to make a center bit with a tapering or screw center, made adjustable in such manner, with respect to the extreme outer edge of its cutter, as to enable the center bit to be capable of boring holes of different diameters; therefore I do not claim such, in the abstract, but what I do claim is, the combination of a tapering center point or screw center, d, and an auxiliary cutter, c, arranged on the shank, A, as described, with a main cutter, f, applied to the shank, so as to be capable of being revolved thereon, and fixed in position thereon, by means substantially explained.

REDUCING WOOD FIBRES TO PAPER PULP.—Henry Voelter, of Heidenheim, Wurtemberg, Germany. Patented in Wurtemberg August 29th, 1856: I make no claim in this application, as to the originality of invention of using wood pulp for paper making, although it might be shown that this even emanated from me; nor do I claim broadly the employment of mechanical agents, in combination with water or other suitable liquids, for the purpose of separating and obtaining the fibres of wood.

I also disclaim the various parts and mechanical devices constituting my machine when separately considered, and when not combined, as set forth; but I claim, First, The particular arrangement, construction and combination of the machinery, or the mechanical expedients employed, as herein specified, for reducing blocks of wood, or producing wood pulp, by feeding them up automatically to a rotating grind or millstone, in connection with the peculiar manner of applying or locating said blocks upon the circumference of the stone, or on a portion of its circumference, by holding them behind each other, in a position and direction essentially the same as described and set forth.

Second, The employment and the combination of a series of perforated and rotating cylinders with the reducing expedient, when contracted and connected between themselves, in the manner herein specified, by surrounding troughs and communicating channels or reservoirs, all made to operate as set forth, and for the purpose of assorting the fibres when separated from the wood in the mode described, rendering the pulp fit to be formed into paper of different qualities.

SEEDING MACHINES.—S. R. Weldron, of Winnebago Station, Ill.: I claim dividing the hopper, C, into two equal compartments, a, b, and using a slide, F, to graduate the opening, a, between them, when the hopper, thus arranged, is used in combination with the rotating seed distributor, where the flap or back board, G, and the double walls, f, g, all arranged to operate as and for the purpose set forth.

[This is an improvement in broadcast sowing machines, and the intention is to produce a machine in which the quantity of seed to be sown in a given area shall be regulated. It is a very perfect and good device.]

BEEHIVES.—Thomas H. Windle, of Wagohstown, Pa.: I am aware that beehives have been made with a moth trap attached, and also with sections of separate bee apartments, arranged together and communicating with each other, and having moth catching holes therein, substantially as described; therefore, I do not claim, broadly, either of these devices, but, First, I claim the combined arrangement in the moth trap (B) of the tapering moth tubes (11, 11, 11), and the ventilated bee escape tubes (12, 12), when the same are used in combination with the hive, the whole being constructed in the manner and for the purposes set forth and described.

Second, I also claim making each of the larger bee apartments (C) with the self-cleaning slide (4), the said slide being conducted as described, and applied in connection with the tongue piece (7), so as to operate substantially in the manner and for the purpose set forth and described.

MACHINE FOR FORMING BATS FOR FELTING.—Thos. B. Butler, of Norwalk, Conn., assignor to Lounsbury, Bissell & Co., of Norwalk, aforesaid: I do not claim the rolls, J, G, or F, nor any combination of them, nor the vibration of J and G, nor the process of depositing the sliver diagonally upon the roll or apron.

But I claim the arrangement of rows of teeth upon each roller, and having roll, to bring the sliver into the vibration of the roll, G, is changed, and the angle formed substantially as described.

I also claim the rods, L, springs, M, pins, P, and cams, R, or their equivalents, arranged and operating as described, and for the purposes set forth.

STEAM ENGINES.—John J. G. Collins, of Philadelphia, Pa., assignor to himself, William A. Rhodes, and Thos. Drake, of Philadelphia, Pa.: Without claiming broadly the super-heating of steam prior to its admission to the cylinder of a steam engine, I claim combining together for joint action, a cooler, regenerator and steam engine, when the said regenerator is constructed and operated substantially in the manner set forth, and when it is furnished with the device specified, or any equivalent to the same, by means of which it receives a supply of steam from the cooler, retains until it is super-heated, and delivers it to the engine, at intervals regulated by the movements of the latter.

BURNERS FOR VAPOR LAMPS.—Frederick Heidrick, of Philadelphia, Pa.; assignor to C. F. Clothier, of Philadelphia, aforesaid: I lay no exclusive claim to the hollow burner, F, the spur, H, or to the introduction of the non-conducting material between the tubes, A and B, but, I claim the employment of the self-adjusting washer, in connection with the burner, F, between G, and wick tube, D, in the manner and for the purpose set forth.

PLOWS.—Joseph Jones, of Wilmington, Del., assignor to Edmund Jones and Joseph Jones, Jr., of Wilmington, aforesaid: I claim the combination of the descent gear and levers, when constructed and arranged for operation conjointly, in the manner as and for the purposes set forth.

TANNING HIDES.—Theodor Klemm, of Pfullingen, near Stuttgart, Wurtemberg, Germany, assignor to Edmund Moss, of London, England: I do not wish to be understood as limiting my claim to the use of the special composition of matter herein specified, as the said composition of matter may be varied within the range of my invention.

What I claim is, the process of treating and impregnating hides, skins, and other animal tissues, by alternately agitating them in a heated atmosphere or current of heated air, and rubbing or smearing them with the substance specified, substantially as and for the purpose specified.

GAS RETORTS.—Alfred Marsh, of Detroit, Mich., assignor to himself, E. Hall Covell, J. Q. Dudley, and Robert Holmes, of Detroit, aforesaid: I do not claim the retort only as in connection with my arrangement, nor do I claim the mode of introducing the gas-making material into the retort as set forth, nor the exit of the gas as described, nor the conducting the fumes from a retort by a pipe, only in connection with my arrangement as described; but, I claim, in the construction of apparatus for the manufacturing of gas from resin or oils, the spiral column leading off from the furnace through the center; a spiral column in combination with the case, in the manner and for the purposes substantially as set forth.

CULTIVATORS.—Robert Sawyer, of Wales, Me., assignor to William G. Brown, of Monmouth, Me.: I do not claim the common cultivator, as made with one or more series of small double plow shares, applied to adjustable bars or supports, connected with a plow beam; but, I claim my improved weeding and hillin plow, constructed substantially as described, viz., with a couler, B, a root cutter, D, adjustable cutters, G, G, and turning shares, L, L, applied to adjustable handles, and a plow beam, said made to operate substantially as specified.

COOKING STOVES.—John L. Stewart, of Nashville, Tenn., assignor to Randolph A. Nathurst, of Nashville, aforesaid: I do not claim the placing of an oven over the fireplace of a stove, for such an arrangement may be seen in many cook stoves, but, I claim, in connection with the sunken recesses, d, the use of flues or passages, d, e, f, substantially as and for the purposes set forth.

[The object of this invention is to prevent the escape of the products of combustion, smoke, gas, &c., from cook stoves when in use, an object not hitherto attained, on account of the exposure of the fire while cooking vessels were being adjusted in and removed from the holes in the top plates.]

FOLDING PAPER.—John North, of Middletown, Conn., assignor to American Book and Paper Folding Company, assignor to Anson Hardy, assignor to Steuben T. Bacon, of Boston, Mass.: I claim placing the sheet direct in register upon the knife to receive its first fold, in the manner and for the purpose above described.

Second, Folding paper by means of a straight edge or knife and reciprocating rollers.

Third, Hanging the frame, m, m, with reciprocating rollers and folding knife, E, attached, to move and reciprocate in the arc of a circle.

Fourth, Causing the rollers to rotate and change their motion alternately, for the purpose specified.

FIFTH, Causing the rollers to rotate and change their motion alternately, for the purpose specified.

PREPARING FRAMES FOR GUILDING.—James W. Campbell, of New York, N. Y.: I do not claim the lathe, C, for this is a well-known device, and in common use for turning oval and circular frames; but, I claim the inclined lathe, C, in combination with the inclined tool, F, when said tool is arranged substantially as described, and for the purpose above described.

Second, The arrangement and the combination of the inclined lathe, C, with the treadle frame, G, and at the same time allowed a lateral movement or play, to conform to any irregular movement of the frame due to an imperfect centering of the same on the plate, b, of the lathe, for the purpose specified.

KNIFE POLISHERS.—W. H. Horstman, of New York, N. Y., assignee of Reuben Shaler, of Madison, Conn. Dated Nov. 28, 1848: I claim the combination of the hopper, B, polishing surface, C, and D, and spring, E, or their equivalents, substantially in the manner and for the purposes set forth.

PRINTING PRESSES.—Geo. P. Gordon, of New York, N. Y. Dated Jan. 1, 1856: I claim First, The arrangement and combination of a rotating disc, W, with an annular ring or outside disc, X, the two revolving each in an opposite direction to the other, for the purpose of breaking up the ink, so that it shall by such contrary motions become evenly distributed, and thus imparted to the rollers which ink the form of types.

Second, I claim moving the rollers, T, "one or more being used" for taking the form, F, in the parallel position they necessarily assume for this purpose, changing to an oblique position which shall give to them a lateral motion, when in contact with the distributing discs, or some equivalent, for the purpose specified.

Third, I claim the arrangement of a form bed, which alternately varies its motion during its reciprocating movement; viz.: first traveling under and in contact with a cylinder to give an impression, then being withdrawn from contact with the cylinder, and remaining withdrawn during the removal, to prevent an impression, such bed reciprocating and at the same time alternating from one of these positions to the other; thus performing two separate and distinct motions, entirely independent of, and in contrary direction to each other, while remaining in gear with the cylinder, when such bed shall be used with a cylinder or its equivalent having a part revolution with a reciprocating movement.

Fourth, I claim attaching to the reciprocating form or type bed, an adjustable rack, as well as a stationary rack, which two racks shall play into gear, upon a cylinder or segment of a cylinder, so that any and all wear or variation may at once be taken up by adjusting the movable rack, and by this means always cause the bed and cylinder or segment of a cylinder to work in harmony with each other and produce a clear and sharp impression free from slur.

Fifth, I do not claim placing a reciprocating bed in a vertical position, or any given angle from a horizontal position. But I claim so placing the bed when used with a rotating reciprocating cylinder or segment of a cylinder, which shall place or pile the sheets of printed paper upon the fly-board as set forth and described.

TURNING AND SLIDING TABLES FOR RAILROADS.—William Sellers, of Philadelphia, Pa. Dated March 23, 1858: I claim interposing the central part or box between the ends of the truss rail beams in such manner as to make use of the width of said central part or box, as a portion of the length of said beams, substantially as described. When the said beams and central part are so constructed and connected, as to form a table entirely supported from the central part or box, substantially as described.

COFFEE POTS.—Charles B. Waite & Joseph W. Sener, of Fredericksburg, Va. Dated April 23, 1855: We do not claim a condensing boiler, but we claim the arrangement described whereby the steam from the boiler is discharged into the water in the condenser, which absorbs the aroma, in combination with the syphon for returning the contents of the condenser into the boiler, substantially as set forth.

SURFACE CONDENSER FOR STEAM ENGINES.—J. P. Pirson, of New York City. Dated April 2, 1850: I claim, first, So enclosing the condensing surfaces of a surface condenser, within a tank which is constructed to be capable of acting as a jet condenser, that when the said surface condenser shall become deranged by breaks or otherwise, resort may be had to the jet condenser, whereby condensation may be continued and the vacuum maintained, substantially as set forth.

Second, The combination of a surface condenser with a box or case, in such manner that the condensation of the steam shall be effected therein, without subjecting the said surface condenser to atmospheric pressure, substantially in the manner described.

Third, The aperture, w, or its equivalent, for maintaining the vacuum, and as a passage for any steam which may remain uncondensed in the radiating condenser, as set forth.

Fourth, Connecting the evaporator with the chamber, h, substantially in the manner described, whereby the saturated water can be drawn off from the bottom of the evaporator.

DESIGNS. PRINTERS' TYPES.—George Bruce, of New York, N. Y. DOOR LOCK PLATES.—Cornelius B. Erwin, of New Britain, Conn. Two cases. DOOR LOCK PLATES.—Henry E. Russell, of New Britain, Conn. BOX STOVES.—N. S. Vedder & Henry Riply, of Troy, N. Y., (assignor to N. S. Vedder, of Troy, aforesaid). COOKING STOVES.—N. S. Vedder, of Troy, N. Y. Two cases.

PARLOR STOVES.—N. S. Vedder, of Troy, N. Y. Two cases.

OYSTERS AND STAR FISH. The July number of the North American Review says, in reference to the havoc made among the oysters by the star fish in the harbor of New York and its vicinity, that the loss has been estimated at many thousands of dollars, and the proprietors of oyster beds have petitioned the State to remit the tax upon them, asserting that unless some way is found to check the ravages of these animals, the oyster is in danger of becoming extinct in many localities where they are now abundant.

The ancients believed that the star fish cunningly inserted one of its rays between the valves, and thus gradually destroyed its victim; but modern observation has determined that its mode of attack is very different. If the oyster is a large bivalve (one that would make the mouth of a crustacean epicure water), four or five asteria attach themselves to it, and waiting patiently until the mollusk opens his shell, intrude between the valves their stomachs, which first, for a greater convenience, they turn inside out. A liquid is supposed to be secreted by the stomach, which acts as an opiate upon the oyster, who no longer possesses the power to close his doors against the intruder, and thus becomes an easy prey to these burglars of the deep. It is to be hoped that the true lover of the delicious oyster, particularly those who are accustomed to study the radiata of the aquarium, will devise some plan to enable the bivalve to retain peaceful possession of his own house until he is forcibly ejected for the benefit of the lords of creation.

VACCINATION.—Too much importance cannot be attached to this great specific against smallpox. In one district in England (so says one of its journals), out of 1,536 deaths 419 have arisen from this terrible disease, a circumstance which requires great and immediate attention; for the large percentage of deaths above alluded to are but a portion which take place in this country annually; and it is to be feared that, if proper means are not taken, the number which is at present so large will soon be increased.

BLACK TONGUE.—A correspondent residing at Howell, Mich., informs us that a disease called the "black tongue" is prevailing in that section, and also that he has noticed that a similar disease is attacking the cattle in the southern States. He says his own experience is that not one in ten of the animals will die if they are permitted to chew coarse salt—the coarser the better. This is a harmless remedy, and should be tried.

A GOOD map of the Submarine Telegraph between America and Europe, well colored, and the Arctic's soundings attached, is sold by McKee & Stillwell, 89 Nassau street, New York. Price 10 cents.